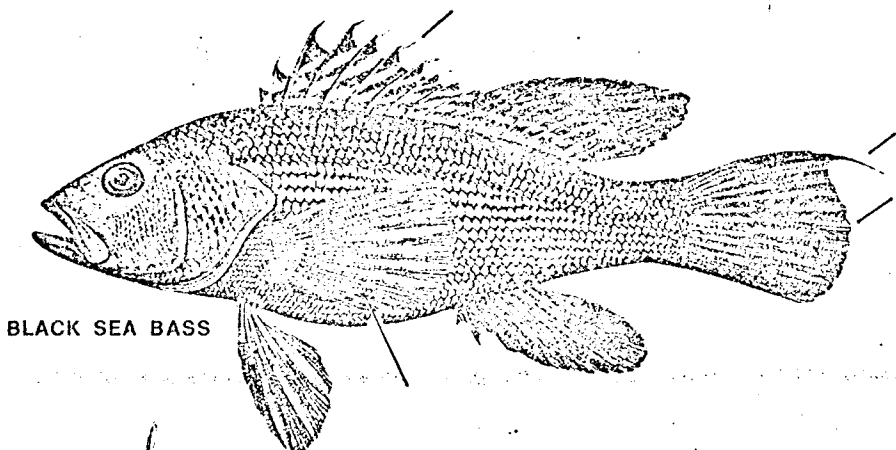




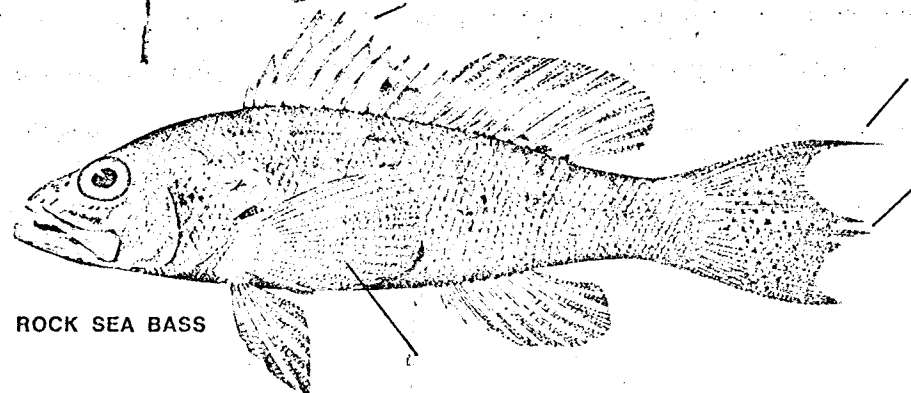
NORTH CAROLINA

TAR HEEL COAST

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BLACK SEA BASS



ROCK SEA BASS

Marks point to distinguishing characteristics.

A SURVEY OF THE SEA BASS FISHERY

by

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The authors present the results of interviews with sea bass fishermen along the Atlantic coast of the United States (Massachusetts-South Carolina) during 1971. Two sea bass species are reported in the catch statistics: *Centropristis striata* and *Centropristis philadelphica*.

TRAWLS

Trawls for capturing sea bass range in size from a No. 35 to a No. 41 Yankee. Trawls are fished over a wide range of depths, 50 feet in the North Atlantic to greater than 300 feet in the Middle Atlantic. Trawling is restricted, however, to firm bottoms in the vicinity of rocks, wrecks, and reefs. South Atlantic fish-

ermen refer to the low profile coral formations as "live bottom." The bulk of the trawl catches in the North Atlantic are confined to two periods, March to June and September to November. Landings in the Middle and South Atlantic are greatest during September to March, although fishing is conducted throughout the year.

TRAPS

Wooden and wire traps are designed to catch sea bass. Traditional wooden traps are used in the Middle and North Atlantic. In New York, the traditional sea bass traps have been modified to catch American lobster; sea bass landings by these traps are incidental to the lobster catch. Each fisherman in the Middle Atlantic lifts a part of his several hundred wooden sea bass traps each fishing day. No baits are used because, according to fishermen, they attract crabs. As a result of declining fish catches in recent years, some fishermen in the Middle Atlantic States have shifted to a modern trap, which is designed to capture light poundages of both lobster and sea bass.

Depths fished in the Middle Atlantic range from 65 feet to 110 feet over rocks and reefs. All traps are first set in May and are removed from the water for storage in November. The largest catches are made in May and October. In the South Atlantic, traditional wire traps designed after the Chesapeake Bay blue crab pot are used. Each South Atlantic fisherman owns only about 30 traps. He set and hauls all the traps four to five times a day and, occasionally, allows them to remain in the water overnight. Practically all fishermen prefer the traditional trap over the larger modern trap, which was designed to capture greater numbers of sea bass. The catches, however, have not met the fishermen's expectations. In our survey we observed only two fishermen using the modern wire trap. Traps are baited with squid, striped mullet, or Atlantic menhaden. Depths and bottom types where bass are found do not differ appreciably from those in the Middle Atlantic, but fishing takes place throughout the year; the highest landings occur from September to June.

Small numbers of sea bass are captured by other types of commercial gear. In the North Atlantic, they are caught by fixed and floating pound nets and hand lines; in the Middle Atlantic, by gill nets, fixed pound nets, hand lines and purse seines; and in the South Atlantic by haul seines and hand lines. Gear other than trawls and traps catch less than 2% of the yearly catch.

CATCH

Since 1965, when the largest landings in recent years were recorded, catches have steadily declined. They dropped from 8.8 million pounds in 1965 to 2.8 million pounds in 1971. This decline has resulted, primarily, from a drop in trawl catches in the Middle Atlantic.

Of the commercial gear, trawls accounted for the largest percentage of the catch, followed by traps (wooden and wire). The trap catch exceeded the trawl catch in only one year, 1967. Since 1960, trawls have averaged 64% of the total catch: 5% landed in the North Atlantic, 50% in the Middle Atlantic, and 9% in the South Atlantic. Most catches by trawlers—locally called draggers—in the Middle Atlantic are landed at Hampton, Virginia. Sea bass account for only a fraction of a dragger's catch. In the South Atlantic, shrimp fishermen change to a different type of trawl in the winter (November to March) to catch fish. During the recent decline in total landings, trawl catches of sea bass in the South Atlantic have been increasing.

The trap fishery accounts for an average of 35% of the total landings. When this figure is added to the trawl landings, 99% of the sea bass catch can be accounted for. Like the trawl landings, however, lowest poundage is landed in the North Atlantic (2%), followed by the South Atlantic (10%), and the Middle Atlantic (23%). In the South Atlantic, captains who operate sportfishing vessels during the summer begin trap fishing in the fall. These boats account for the major part of the North Carolina catch.

SPORT CATCH

Figures for the catch landed by anglers are not available. The catch appears to be large. Deuel and Clark estimated the 1965 landings in the North and Middle Atlantic at 9.1 million pounds, 300,000 pounds greater than the total commercial catch.